

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 32

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte FRANK DERUYCK,
and WILFRIED COPPENS

Appeal No. 1996-2928
Application 08/313,727

HEARD: MAY 1, 2000

Before KIMLIN, OWENS and LIEBERMAN, **Administrative Patent Judges**.

LIEBERMAN, **Administrative Patent Judge**.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 from the examiner's refusal to allow claims 1, 5, 6, 8 through 12, 14 through 17, and 19 through 23 which are all the claims remaining in the application.¹

¹Claim 23 is inadvertently omitted from Appellants' Brief. See Notice of Appeal filed April 18, 1995 which included claim 23.

THE INVENTION

The invention is directed to a high pressure lubricant additive. The additive consists of a composition containing phosphorous and diamines characterized by a $C_{12} - C_{22}$ fatty acid residue $RCOO^-$ having at most one fatty acid residue per two zinc units, wherein the zinc is bonded with phosphate ions.

THE CLAIMS

Claim 1 is illustrative of appellants' invention and is reproduced below.

1. A high pressure lubricant additive comprising complex compound suitable for use in a high pressure additive to facilitate lubrication of metal surfaces, containing phosphorous and diamines and dispersible in oils or oil emulsions, characterized in that it consists of a composition containing a $C_{12}-C_{22}$ fatty acid residue with at most one fatty acid residue group ($RCOO$) per two zinc atoms and zinc is bonded with phosphate ion.

THE REFERENCE OF RECORD

As evidence of obviousness, the examiner relies upon the following references.

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|--------------------------|-----------|---------------|
| Elliott et al. (Elliott) | 2,976,238 | Mar. 21, 1961 |
| Brannen et al. (Brannen) | 3,791,804 | Feb. 12, 1974 |

THE REJECTION

Claims 1, 5, 6, 8 through 12, 14 through 17, and 19 through 23 stand rejected under 35

U.S.C. § 103 as being unpatentable over Brannen combined with Elliott.

OPINION

We have carefully considered all of the arguments advanced by appellants and the examiner and agree with appellants that the aforementioned rejection under 35 U.S.C. § 103 is not well founded. Accordingly, we do not sustain the examiner's rejection.

The Rejection under § 103

“[T]he examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a prima facie case of unpatentability.” See In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). The examiner relies upon a combination of two references to reject the claimed subject matter and establish a prima facie case of obviousness. The basic premise of the rejection is that the primary reference to Brannen discloses a metal complex comprising a transition metal, a polyamine, and an acid component which can be a phosphoric acid or a fatty acid. Similarly the secondary reference to Elliott teaches a metal complex comprising an amine and organic acid selected from a group of acids including a carboxylic acid and a phosphoric acid. Since phosphorous and fatty acids are taught in the alternative, the combination of metal amine, phosphorous and fatty acid in complex form would have been obvious to the person of ordinary skill in the art. See Answer, pages

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3 and 4. We disagree.

The metal complex of Brannen may be produced by a reaction between an alkyl phosphoric acid or an alkyl carboxylic acid and a transition metal complex of a polyamine, column 1, lines 60-67. However, we find that only phosphorous acids having the ion, (PO_3^{-3}) , are utilized or exemplified. See Example 1 and column 3, lines 20 to column 4, lines 3. Based on these findings, we conclude that phosphorous acid will not provide the requisite phosphate ion, (PO_4^{-3}) , as required by the claimed subject matter. Furthermore, it is reasonable to conclude that Brannen never contemplated the use of “phosphoric acid,” per se, and used the term only in a generic sense. Finally, we determine that there is no suggestion of simultaneously using both a carboxylic acid and a phosphorous acid in the formation of the metal complex of Brannen.

Elliott’s disclosure is similar to that of Brannen. Elliott discloses engine oil lubricant, column 2, line 9-11, which contains a metal complex of a polyvalent metal capable of forming a coordination complex, a polyamine and an organic acid residue. See column 2, lines 30-39. The preferred metal is zinc. See column 2, lines 54-55. The organic acids include phosphates, sulfonates and carboxylates, column 2, lines 39-49, and suitable carboxylates are found at column 2, line 64 - column 3, line 4.

However, in order to arrive at appellants’ claimed subject matter, we would have to utilize both phosphate and carboxylate in the formation of the metal complex, but there is no suggestion for combining the two components. Moreover, even were we to prepare a complex compound containing both carboxylate and phosphate, we would have to satisfy the requisite proportions of the claimed

subject matter wherein, “a composition containing a C_{12} - C_{22} fatty acid residue with at most one fatty acid residue group (RCOO) per two zinc atoms,” is formed. However, neither Brannen nor Elliott suggests the stoichiometry of the claimed subject matter. Brannen teaches, “equimolar quantities,” Example 1 and, “equimolar amounts,” claim 1. Similarly, column 2, lines 33-35 of Elliott require that the amount of carboxylate, sulfonate or phosphate be sufficient to satisfy the valence of the polyvalent metal. In order to satisfy the valency of M, we need four fatty acid residues per two zinc atoms. Accordingly, the proportions taught in each reference are four times as much as the maximum set by the claimed subject matter. Based upon the above findings, even were we to choose both phosphate and carboxylate moieties, we conclude that there is no teaching or suggestion to choose the proportions of the claimed subject matter.

Accordingly, we have determined that the examiner’s legal conclusion of obviousness is not supported by the facts. “Where the legal conclusion [of obviousness] is not supported by the facts it cannot stand.” In re Warner, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967).

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DECISION

The rejection of claims 1, 5, 6, 8 through 12, 14 through 17, and 19 through 23 under 35 U.S.C. § 103 as being unpatentable over Brannen combined with Elliott is reversed.

The decision of the examiner is reversed.

REVERSED

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|-----------------------------|---|-----------------|
| EDWARD C. KIMLIN |) | |
| Administrative Patent Judge |) | |
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| |) | |
| |) | BOARD OF PATENT |
| TERRY J. OWENS |) | |
| Administrative Patent Judge |) | APPEALS AND |
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| |) | INTERFERENCES |
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